

Investigator's Name	Institution	State	Brief Description of Instrumentation or Research it Supports
Aleksander Rebane	Montana State University	MT	Two Photon Porphyrin Core Dendrimers for Optical Power Limiting
Amy J. Moll	Boise State University	ID	Micro-Propulsion Devices in Low Temperature Co-Fired Ceramic Materials
Bruce F. O'Hara	University of Kentucky	KY	Identification of Genes that Influence Sleep & Wake, using a Novel, High-throughout, Piezoelectric Technolgy
David J. Keffer	University of Tennessee	TN	Computational and Experimental Study of High-Performance Lubricants in Extreme Environments
James P. Shaffer	University of Oklahoma Norman Campus	OK	Three Body Recombination & Photoassociative Ultracold Collisions Studied Using Translatinal Energy
Jianke Yang	University of Vermont	VT	Nonlinear Wave Motion in Physical Systems
John P McHugh	University of New Hampshire	NH	Nonlinear Aspects of Internal Waves in the Atmosphere
Jonathan W Naughton	University of Wyoming	WY	Integrated Computational/Experimental Study of Turbulence Modification and Mixing Enhancement in Swirling Jets
Rosanne F. Gamble	University of Tulsa	OK	Security Certification Models
Samit Roy	Oklahoma State University	OK	Life Prediction of High Temperature Polymer Matrix Composites for Aircraft Engine and Airframe Applications

Yongfeng Lu	University of Nebraska-Lincoln	NE	Laser-assisted Fabrication of Large-scale 3-D Photonic Bandgap Structures
David A. Boyles	South Dakota School of Mines & Technology	SD	Design and Synthesis of High Aspect Ratio Polycarbonates for Transparent Armor Applications
Harlan B. Russell	Clemson University	SC	Protocols for Heterogeneous Mobile Ad Hoc Networks with Directional Antennas
Jan A Puszynski	South Dakota School of Mines	SD	Thermal, Impact, and Electrostatic Sensitivites of Energetic Nanocomposites
Johnson P. Thomas	Oklahoma State University	OK	A Secure Networked Sensor Environment (SENSE)
Kelly L. Drew	University of Alaska Fairbanks	AK	Central Nervous System Regulation of Metabolic Suppression for Combat Casualty Care
Matthew A. Nolan	University of Alaska Fairbanks	AK	Innovative Measurement of Soil Moisture
Michael L. Norton	Marshall University	WV	Directed Sequential Assembly via DNA Based Nanostructures
Min Xiao	University of Arkansas	AR	Low-Power, Ultrafast Optical Switches Based on Coherence Optical Effects in Arrayed Semiconductor Nanostructures
Mingzhen Tian	Montana State University	MT	Quantum Computing Using Thulium Doped Crystals
Bart Geerts	University of Wyoming	WY	Mesoscale Dynamics and Cloud Microphysics of Marine Stratocumulus off the US West Coast
Hichem Frigui	University of Louisville	KY	Developing Robust Clustering and HMM Parameter Estimation Algorithms with Application to Land Mine Detection
Radim Bartos	University of New Hampshire	NH	Highly Accurate Temporal and Spatial Mapping of Coastal Regions Using Long Endurance Autonomous Vehicles
Ronald A. DeVore	University of South Carolina	SC	Nonlinear Methods for Supervised Learning: Defense Applications
Sushil J. Louis	University of Nevada	NV	Combining Learning and Human Modeling for Virtual at Sea Training
Vincent Caccese	University of Maine	ME	Structural Response of Hybrid Ship Connections Subjected to Fatigue Loads

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FY 2005 Awards for the Defense Experimental Program to Stimulate Competitive Research (DEPSCoR)

Principal Investigator	Institution	Department	State	Prop Title	Sponsor
Radim Bartos	University of New Hampshire	Computer Science	NH	Highly Accurate Temporal and Spatial Mapping of	ONR
David A. Boyles	South Dakota School of Mines & Technology	Chemistry and Chemical	SD	Design and Synthesis of High Aspect Ratio	ARO
Vincent Caccese	University of Maine	Mechanical Engineering	ME	Structural Response of Hybrid Ship Connections	ONR
Ronald A. DeVore	University of South Carolina	Mathematics	SC	Nonlinear Methods for Supervised Learning:	ONR
Kelly L. Drew	University of Alaska Fairbanks	Institute of Arctic Biology	AK	Central Nervous System Regulation of Metabolic	ARO
Hichem Frigui	University of Louisville	Computer Engineering & Computer	KY	Developing Robust Clustering and HMM	ONR
Rosanne F. Gamble	University of Tulsa	Mathematical & Computer Sciences	OK	Security Certification Models	AFOSR
Bart Geerts	University of Wyoming	Atmospheric Science	WY	Mesoscale Dynamics and Cloud Microphysics of	ONR
Yanyao Jiang	University of Nevada - Reno	Mechanical Engineering	NV	Development of a Novel Approach for Fatigue Life	ONR
David J. Keffer	University of Tennessee	Chemical Engineering	TN	Computational and Experimental Study of High-	AFOSR
Sushil J. Louis	University of Nevada - Reno	Computer Science & Engineering	NV	Combining Learning and Human Modeling for	ONR
Yongfeng Lu	University of Nebraska-Lincoln	Electrical Engineering	NE	Laser-assisted Fabrication of Large-scale 3-D	AFOSR
John P. McHugh	University of New Hampshire	Mechanical Engineering	NH	Nonlinear Aspects of Internal Waves in the	AFOSR
Amy J. Moll	Boise State University	Materials Science & Engineering	ID	Micro-Propulsion Devices in Low Temperature Co-	AFOSR
Jonathan W. Naughton	University of Wyoming	Mechanical Engineering	WY	Integrated Computational/Experimental Study of	AFOSR
Matthew A. Nolan	University of Alaska Fairbanks	Inst. Of Northern Engineering, Water	AK	DIInSAR Measurement of Soil Moisture	ARO
Michael L. Norton	Marshall University	Chemistry	WV	Directed Sequential Assembly via DNA Based	ARO
Bruce F. O'Hara	University of Kentucky	Biology	KY	Identification of Genes that Influence Sleep &	AFOSR
Jan A. Puszynski	South Dakota School of Mines & Technology	Chemistry and Chemical	SD	Thermal, Impact, and Electrostatic Sensitivities of	ARO
Aleksander Rebane	Montana State University	Physics Department	MT	Two Photon Porphyrin Core Dendrimers for	AFOSR
Samit Roy	Oklahoma State University	Mechanical and Aerospace	OK	Life Prediction of High Temperature Polymer	AFOSR
Harlan B. Russell	Clemson University	Electrical and Computer Engineering	SC	Protocols for Heterogeneous Mobile Ad Hoc	ARO
James P. Shaffer	University of Oklahoma Norman Campus	Physics and Astronomy	OK	Three Body Recombination & Photoassociative	AFOSR
Johnson P. Thomas	Oklahoma State University	Computer Science	OK	A Secure Networked Sensor Environment	ARO
Mingzhen Tian	Montana State University	Physics	MT	Quantum Computing Using Thulium Doped	ARO
Min Xiao	University of Arkansas	Physics	AR	Low-Power, Ultrafast Optical Switches Based on	ARO
Jianke Yang	University of Vermont	Mathematics and Statistics	VT	Nonlinear Wave Motion in Physical Systems	AFOSR